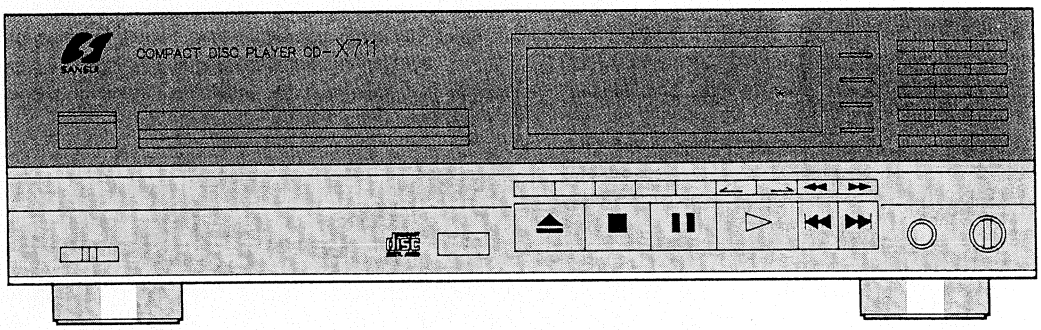
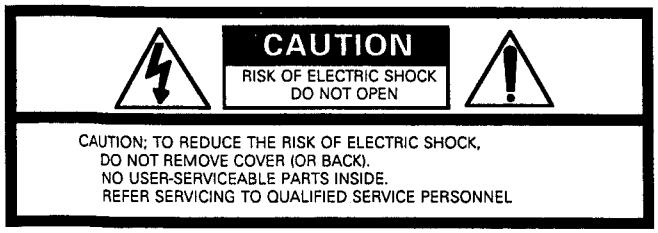
COMPACT DISC PLAYER

CD-X711

OPERATING INSTRUCTIONS



SANSUI


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION; TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilaterl triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

ENGLISH

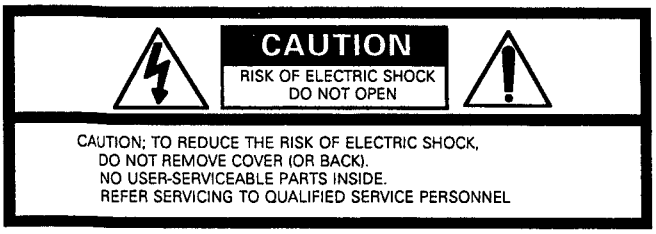
5~26

Table of contents

Precautions 5
Before operation 6
Connections 6
Remote controller 10
Pannel information 11
Display details 13
Basic operations 16
Value-added operations 18
Troubleshooting 26
Specifications 26

WARNING: To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

- **The model No. and Serial No. of your unit are shown on its back panel.**
- **SANSUI attests that this product conforms with EEC directive 82/499/EEC.**
- **This unit keeps the postal regulations accordiing VDE 0871./0875.**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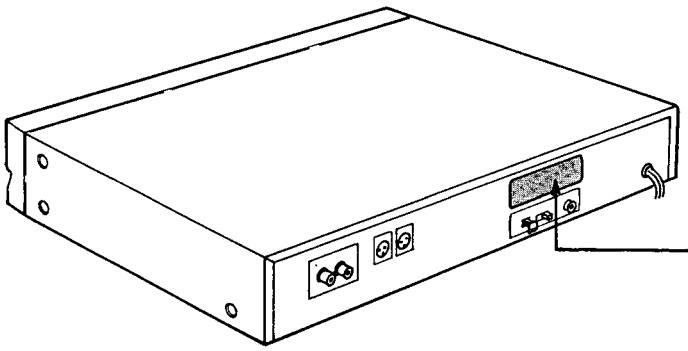
CAUTION : USE OF CONTROLS FOR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

The following label has been affixed to the unit, listing the proper procedure for working with the laser beam.



(UL and XX model only)

PRODUCT COMPLIES WITH DHHS RULES 21 CFR, SUBCHAPTER J, PART 1040. 10.
MANUFACTURED:

(CSA model only)

CERTIFIELD ONLY TO CANADIAN ELECTRICAL CODE.

CERTIFIE EN VERTU DU CODE CANADIAN DE L'ELECTRICITE SEULEMENT

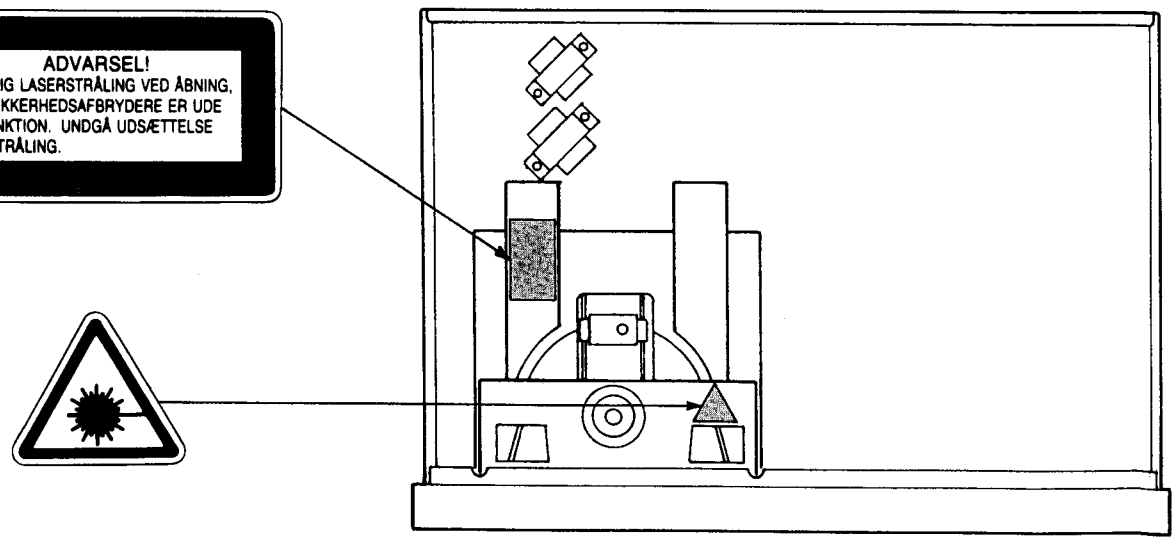
(EU model only)

CLASS 1
LASER PRODUCT

UL..... Manufactured for U.S.A market.
XX..... Standard Version.
CSA..... Manufactured for Canadian market.
EU..... Manufactured for European market.

(EU model only)

ADVARSEL!
USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.



CAUTION (PREPARED IN ACCORDANCE WITH UL STANDARD 1270)

1. Read Instructions — All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions — The safety and operating instructions should be retained for future reference.
3. Head Warnings — All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions — All operating and other instructions should be followed.
5. Water and Moisture — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near swimming pool, etc.
6. Carts and Stands — The appliance should be used only with a cart or stand that is recommended by the manufacturer
7. Wall or Ceiling Mounting — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat — The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.
10. Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. Cleaning — The appliance should be cleaned only as recommended by the manufacturer
13. Nonuse Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. Object and Liquid Entry — Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the appliance.
15. Damage Requiring Service — The appliance should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped, or the cabinet damaged.
16. Servicing — The use should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.

For the Customers

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception.
It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules. which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

..... reorient the receiving antenna
..... relocate the equipment with respect to the receiver
..... move the equipment away from the receiver
..... plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an exprienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio—TV Interference Problems" This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS

LE PRÉSENT APPAREIL NUMÉRIQUE N'ÉMET PAS DE BRUITS RADIOÉLECTRIQUES DÉPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMÉRIQUES DE CLASSE B PRESCRITES DANS LE RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUE ÉDICTÉ PAR LE MINISTÈRE DES COMMUNICATIONS DU CANADA

Thank you for purchasing this fine SANSUI product. Taking the time to read these operating instructions carefully before use will acquaint you fully with all its features and help ensure optimum performance.

*** In order to simplify the explanation illustrations may sometimes differ from the originals.**

ENGLISH

Precautions

Power plug
When disconnecting the power cord from the power outlet, always take hold of the plug, and not the wire, and pull free. Never connect or disconnect the power plug with wet hands since you may receive an electric shock.

* Remember to disconnect the power plug from the power outlet when you do not intend to use the unit for a prolonged period of time.

Do not remove the case and bottom panel
Any inspections or adjustments inside the unit may lead to malfunctions and electric shocks. Do not touch any of the inside parts. SANSUI's warranty is not effective if a deterioration in the unit's performance results from remodeling inside.

Do not wipe with thinners
Wipe the panels and case from time to time with a soft cloth. Using any kind of thinner, alcohol or volatile liquid will mar the surface, cause blotching on the exterior and erase the markings and should therefore be avoided.
Do not use insecticide sprays in the vicinity

Condensation
In the following instances condensation may form inside the CD player, droplets of water may form on the pick-up lens and the unit may not operate properly as a result.

* When the unit is in an initially cold room which is then warmed up rapidly
* When the unit is moved from a cold location to a warm location
* When the unit is used in a room with a great deal of steam or moisture in the air

Although it depends on the ambient conditions, the condensation will normally dry out if the unit's power is switched on and the unit is then left for about an hour
If you have reason to believe that condensation has formed, remove the disc, keep the power on and leave for about an hour before operation.

Installation precautions
Do not install the unit in any of the following locations since this may result in a deterioration in performance or malfunction:

* Locations exposed to direct sunlight or near objects radiating heat such as heating appliances.
* Locations exposed to moisture or humidity
* Locations with poor ventilation exposed to dust and dirt.
* Locations which are unstable and not perfectly flat or which are susceptible to vibration.
* When this unit is used at the same time and in close proximity to other components such as a tuner or television, adverse effects may be caused. In this case, install the components further away from the unit.

**Do not place this unit on top of a component, such as a stereo amplifier, which generates a great deal of heat.
Such an action may result in failures and malfunctioning.**

*** Note that the disc stabilizer cannot be used with this unit.**

Before connecting power plug to outlet
Before connecting the unit, be sure to always check as explained below that the unit voltage and the power source voltage match. If the unit is connected to a power source with excessive voltage, fire or breakdown may result. If you find that the unit is not set to the proper voltage for your area, follow the instructions listed below:

- **Units with 120V/220V ~ 240V VOLTAGE SELECTOR switch at rear panel**
  These units are set at either 120V or 220V ~ 240V with the VOLTAGE SELECTOR switch. To change the voltage, use a minus screwdriver or similar device to slide the switch.

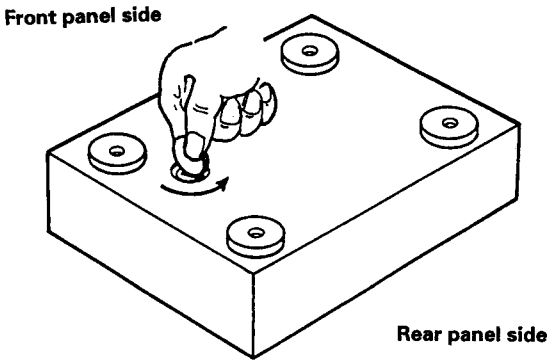
VOLTAGE SELECTOR	VOLTAGE SELECTOR
120V ⟷ 220V~240V	120V ⟷ 220V~240V
At 120V	At 220V ~ 240V

- **Units without voltage selector switch**
  Units destined for some areas are not fitted with a voltage selector switch due to laws and regulations existing in those areas. In such a case, the power supply voltage is set to the voltage used in the area where the unit is purchased.
  If the unit is to be used in an area where the power requirements are different, make sure you consult your nearest authorized SANSUI Service Station.

ENGLISH

Before operation

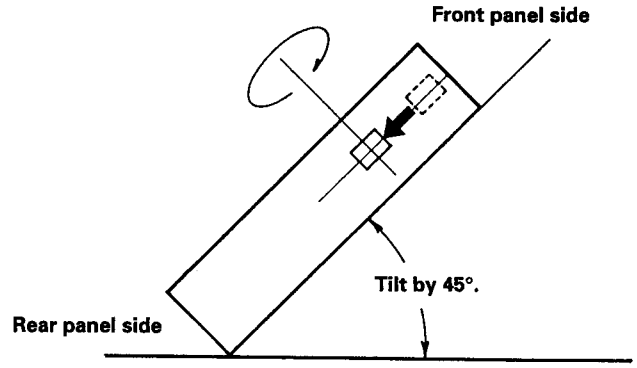
A transport protection stopper is provided on the bottom panel of the unit to protect optical components including the laser diode from shocks during transport. Before operating the unit, unlock the stopper by turning it from the **LOCK** position to **FREE** position following the indication on the label attached on the bottom panel.



In case the unit is to be transported next time

(Be sure to lock the stopper.)

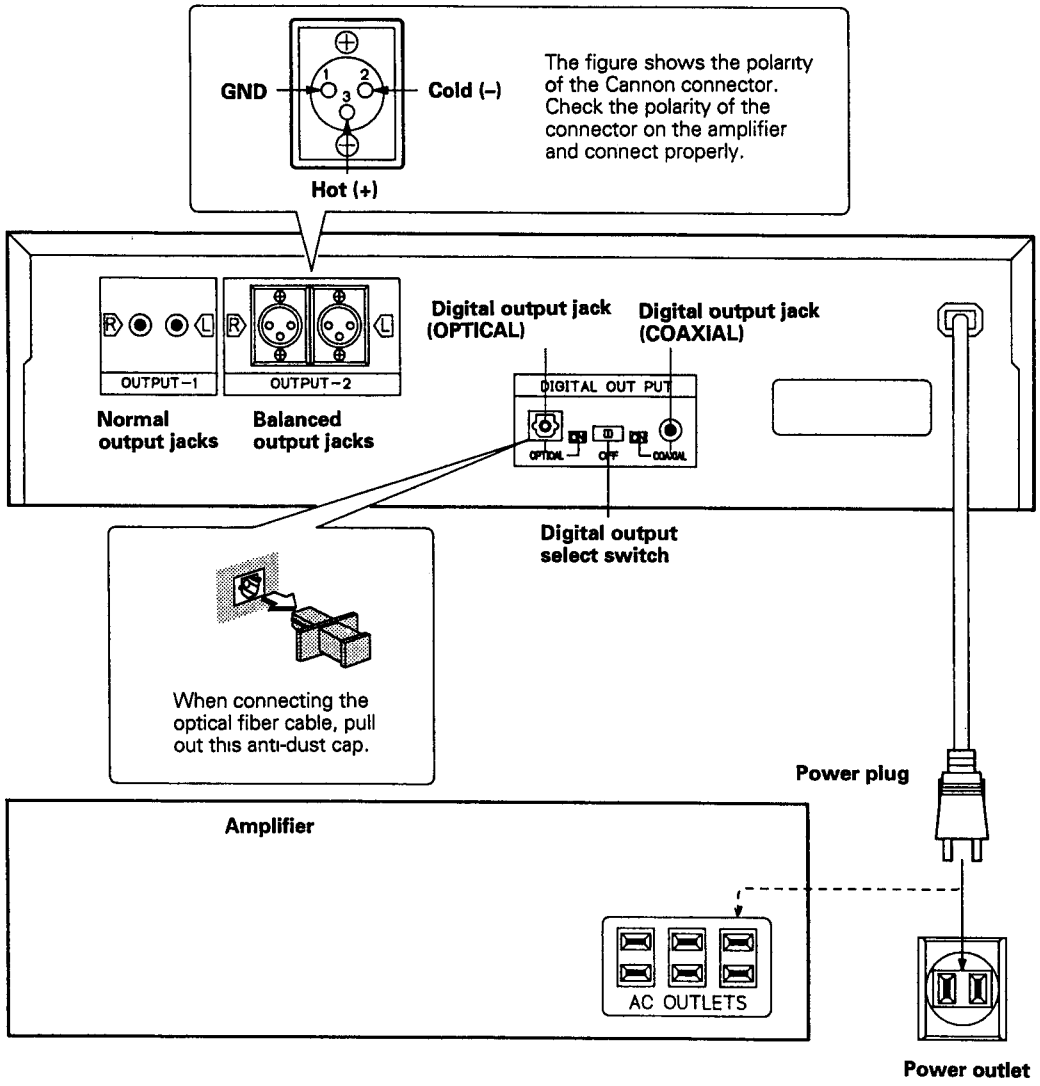
After checking that no disc is present on the disc tray, and switch the power of the unit to OFF Then tilt the unit by lifting the front panel side by 45°; this will move the pickup toward the rear panel side. Now,with this condition, turn the stopper on the bottom panel from the **FREE** position to **LOCK** position by a coin, etc., and ensure that the stopper is locked at that position.



Connections

* Before proceeding to connections, switch the powers of the components (amplifier, digital/analog processor) to be connected to this unit.
* Never connect the pin-plug cord from this unit to the PHONO jack on the amplifier, or the reproduced sound will be distorted or otherwise abnormal.
* The optical fiber cable and 75-ohm coaxial cable are optional and available separately from this unit.

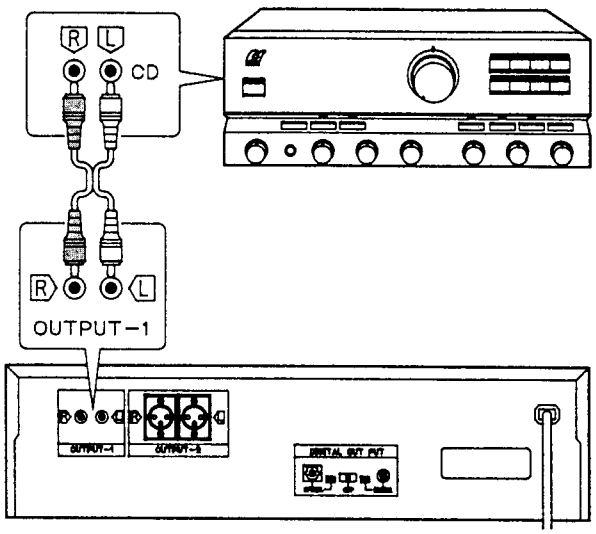
Rear panel of this unit



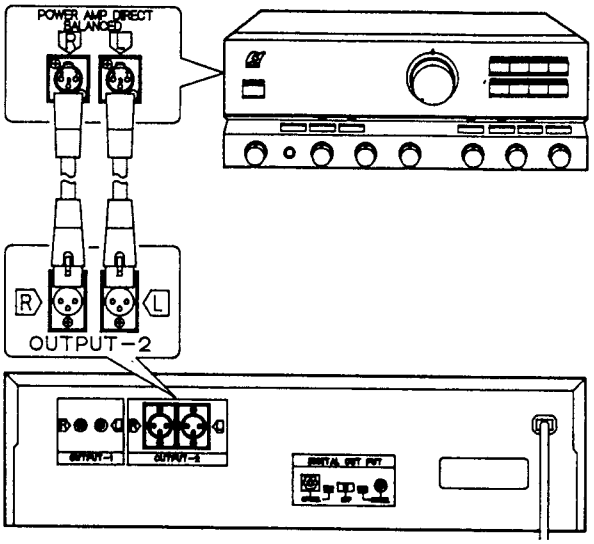
Connection method - 1
(Connection of Normal output jacks and Balanced output to the integrated amplifier)

* Set the Digital output select switch on the rear panel of this unit to OFF

Connection of OUTPUT-1 jacks to integrated amplifier
Using the supplied RCA-type pin-plug cord, connect the Normal output (OUTPUT-1) jacks of this unit to the CD (or AUX) input jacks of the amplifier. Connect the red plugs to the R (Right) jacks, and white plugs to the L (Left) jacks.

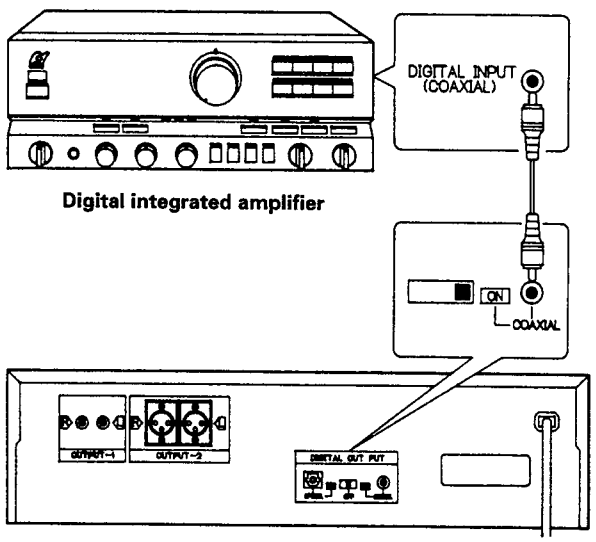


Connection of OUTPUT-2 jacks to integrated amplifier
If the amplifier is equipped with a balanced input connector, connect the Balanced output (OUTPUT-2) jack of this unit to the balanced input jacks of the amplifier using a Cannon connector cable (optional). Refer to the figure showing the polarity of Cannon connector (page 7) and connect them with correct polarity.

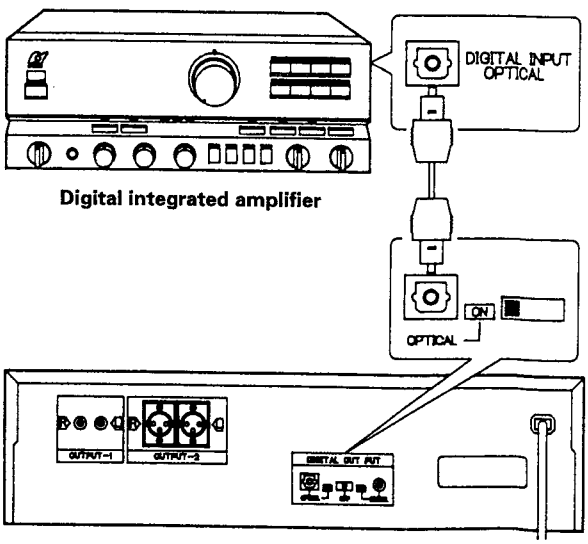


Connection method - 2
(Connection of Digital output jack to digital integrated amplifier)

Connection of COAXIAL jack to digital integrated amplifier
Using a 75-ohm digital connection coaxial cable, connect the Digital output (COAXIAL) jack of this unit to the Digital input (COAXIAL) jack (CD) of the digital amplifier.
* When playing the digital output of this unit, set the Digital output select switch on the rear panel of this unit to COAXIAL.



Connection of OPTICAL jack to digital integrated amplifier
Using an optical fiber cable, connect the Digital output (OPTICAL) jack of this unit to the Digital input (OPTICAL) jack of the digital amplifier.
* When playing the digital output of this unit, set the Digital output select switch on the rear panel of this unit to OPTICAL.



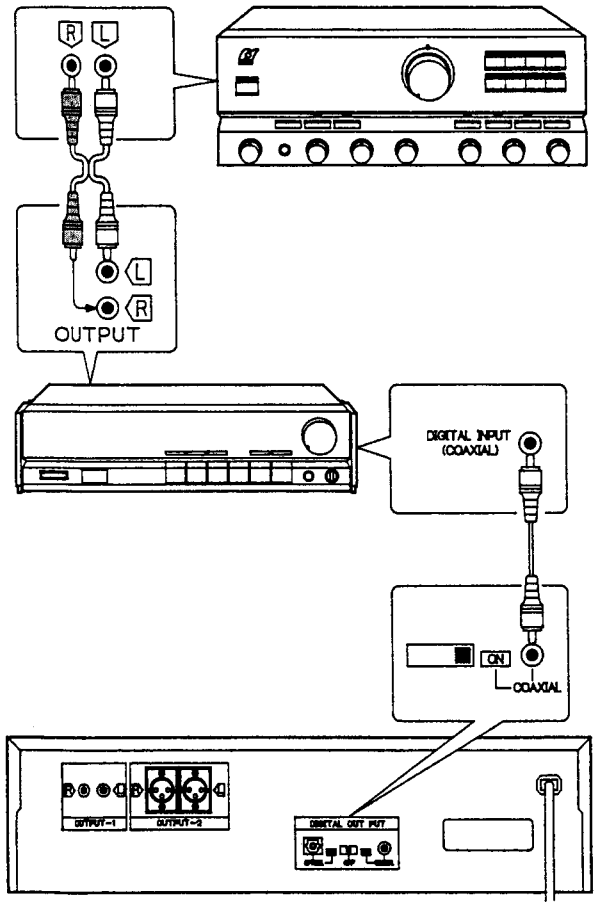
* For details, please refer to the operating instructions of the digital integrated amplifier.

Other connection methods (Connection of Digital output jacks to digital/analog processor)

Connection of COAXIAL jack to digital/analog processor

1 Using a 75-ohm digital connection coaxial cable, connect the Digital output (COAXIAL) jack of this unit to the Digital input (COAXIAL) jack (CD) of the digital/analog processor.
2. Using an RCA-type pin-plug cord, connect the ANALOG OUTPUT jacks of the digital/analog processor to the CD (or AUX) input jacks of the amplifier.

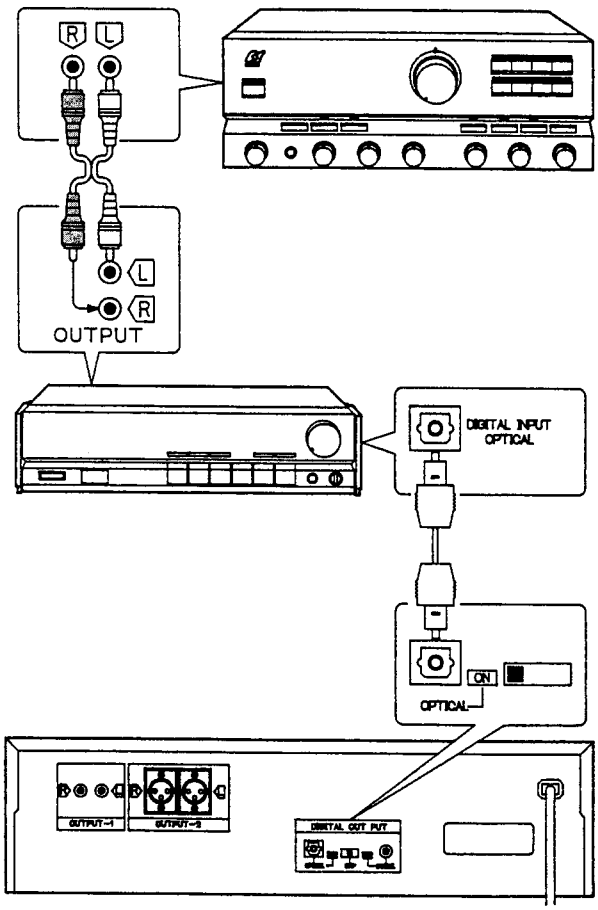
* When playing the digital output of this unit, set the Digital output select switch on the rear panel of this unit to COAXIAL.



Connection of OPTICAL jack to digital/analog processor

1 Using an optical fiber cable, connect the Digital output (OPTICAL) jack of this unit to the Digital input (OPTICAL) jack of the digital/analog processor.
2. Using an RCA-type pin-plug cord, connect the ANALOG OUTPUT jacks of the digital/analog processor to the CD (or AUX) input jacks of the amplifier

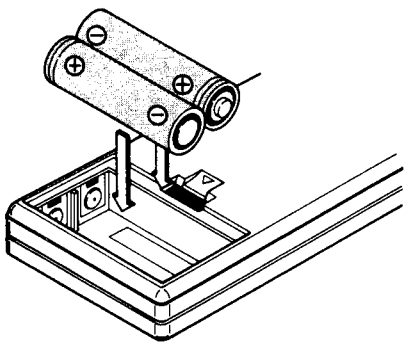
* When playing the digital output of this unit, set the Digital output select switch on the rear panel of this unit to OPTICAL.



CAUTION

When connecting an optional digital/analog processor, be sure to use a digital/analog processor for use with CD signals. Other types of digital/analog processors cannot be used. For details, please refer to the instruction manual of the digital/analog processor.

Remote controller



Inserting the dry batteries

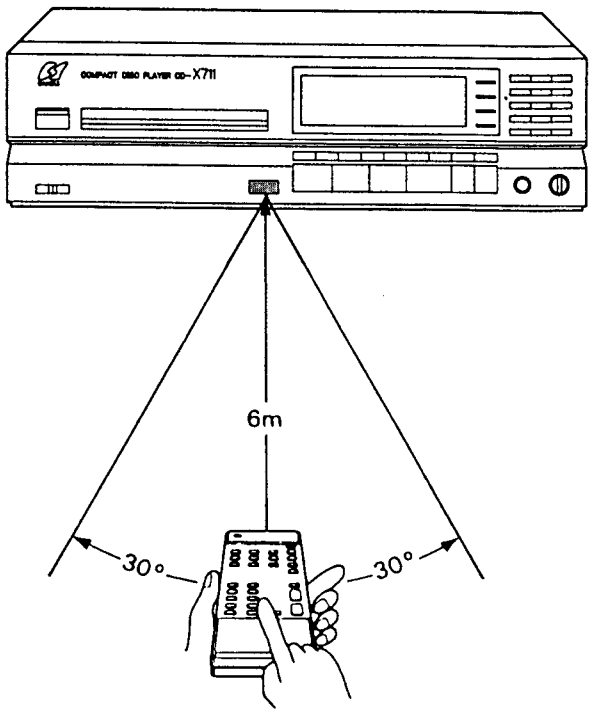
1 Remove the cover of the battery compartment.
2. Insert the two accessory IEC R6 (type "AA") batteries. Align the polarities of the batteries with the (+) and (−) markings inside the compartment and insert properly
3. Replace the compartment lid.

Replacing the dry batteries

The operating range of the remote control unit will be reduced when the batteries become weak. When this happens, replace both of the batteries with fresh ones.

* Use two 1.5V IEC R6 (type "AA") batteries with this remote controller
* Do not mix new batteries with already used batteries.
* Use batteries designed to prevent leakage of the internal electrolyte.

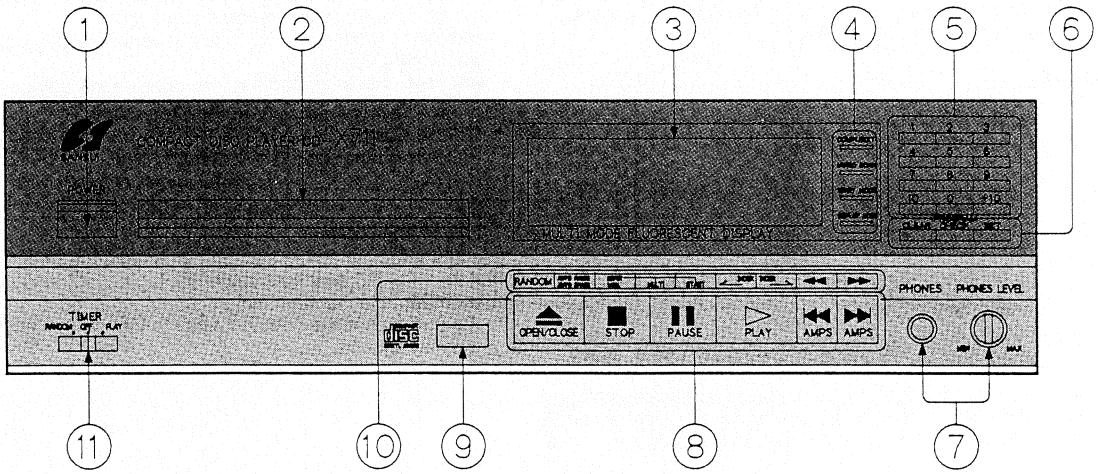
Operating the remote controller



Bear in mind the following points when using the remote controller

* Point the transmitter of the remote controller properly at the sensor on the unit and operate.
* The remote controller will work within a distance of about 6 meters from the front of the unit and within a range of about 30 degrees at either side, left or right, provided that there are no obstacles between the remote controller and the unit.
  If the remote controller is brought closer to the unit, this operating angle is increased.
* Exposure to direct sunlight or strong lights such as a spotlight will reduce the operating distance or even make the remote controller inoperable.
* Press each of the control keys properly one at a time.
* Handle the remote controller properly—do not drop it or splash it with water
* Do not leave the remote controller in a location where it will be exposed to direct sunlight or to high temperatures or humidity levels.

Panel information



(1)
POWER Switch
Press this switch to switch the power of this unit ON-OFF The indicator light when the power is ON.

(2)
DiscTray
The disc tray comes out when the OPEN/CLOSE key is pressed. Place the Compact Disc to be played on the tray.

(3)
Display
Displays the track No., playing time, operating mode, etc.
* For details, refer to "Display details" on page 13.

(4)
COMPUEDIT Key
Press the key to start Compu Edit. This feature selects the tracks that can be recorded in the limited recording time of a tape, edits their order, and records them on a tape.

MUSIC SCAN Key
Press this key to find a desired track by playing all tracks in the disc.

10 KEY MODE Key
Press this key to switch between Normal track selection and Direct track selection modes.

DISPLAY MODE Key
Press to change the contents of playing time display. When this key is pressed during play, the display content changes in the following order.

Playing time of the track being played
↓
Playing time of the track + Track No. + Remaining playing time of the track
↓
Playing time of the track + Track No. + Elapsed playing time from track No. 1 (with TOTAL indicator lit)
↓
Playing time of the track + Track No. + Remaining playing time until the last track in disc (with TOTAL indicator lit)

* When the DISPLAY MODE key is pressed in the Stop mode, the total number of tracks and total playing time of the disc are displayed.
* When the key is pressed during Random play, the remaining playing time including the track being played is displayed.

(5)
Numeric Keys (1 to 0)
Use these 10 keys to select a track No. for starting play from a desired track or for programming tracks.

+10 Key
Press to select a track No. of more than 10 for Direct track selection.

(6)
CLEAR Key
Press this key to clear a track from the program.

CHECK Key
Press this key to check the tracks and their order in the program. Every time the key is pressed, the program No. and track No. are displayed in the programmed order.
* The program contents cannot be checked during Play or Pause mode.

SET Key
When a track No. to be programmed is selected by the numeric (1 to 0) keys or AMPS (I◄◄, ►►I) keys, press this key to enter it in the program.

(7)
Head Phones Level Control (PHONES LEVEL)
Turn this control to adjust the headphone volume. Turning it clockwise increases the volume. Adjust to an optimum level which will not hurt your ears.
* This control does not affect the signal output level from the output jacks.

Head Phone Jack (PHONES)
When listening to CD play through headphones, insert the headphone plug into this jack.

(8)
OPEN/CLOSE (▲) Key
Press this key to open or close the disc tray. The disc tray comes out or withdraws every time the key is pressed.

STOP (■) Key
Press this key to stop the CD play.

PAUSE (II) Key
Press this key to pause the CD play temporarily.To resume the play, press the same PAUSE (II) key or the PLAY (▷) key.Also press this PAUSE (II) key when starting COMPU EDIT play.

PLAY (▷) Key
Press this key to start CD play.

AMPS (Automatic Music Program Search) (|◄◄, ►►|) Keys
Press one of these keys during CD play to return to the beginning of the track being played or to search the beginning of a desired track. Holding the key depressed varies the destination track No. in sequence.
|◄◄ key: Pressing this key once searches the beginning of the track being played. When the key is further pressed or held depressed, the beginnings of the previous tracks will be searched in sequence (until track No. 1).
►►| key: When this key is pressed or held depressed, the beginnings of the next tracks will be searched in sequence.If one of these keys is pressed in the Pause mode, the CD player enters the Pause mode after searching the beginning of the desired track.
In the Compu Edit operation, these keys are used to set the standard tape recording time (15, 23, 27, 40, 45 min., etc.)

(9)
Infrared Receptor
The infrared ray transmitted from the remote controller enters the main unit through this window.

(10)
RANDOM Play Key
Press this key to play the tracks in the CD in a random order.

AUTO PAUSE/AUTO SPACE Key
The first press of this key sets the Auto Pause feature, the second press sets the Auto Space feature, and the third press cancels both of them, in sequence.

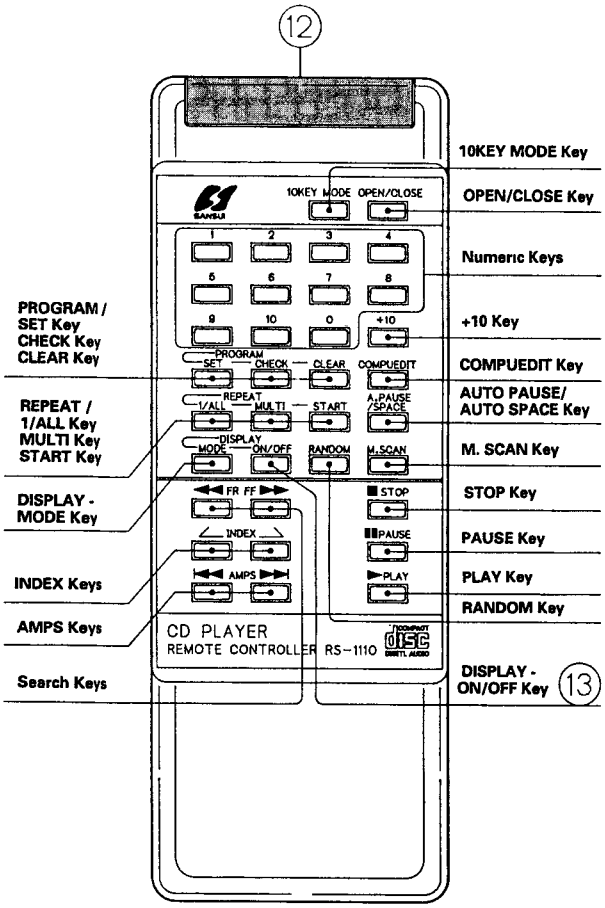
REPEAT (1/ALL/MULTI/START) Keys
Press one of these keys to select the Repeat play mode.
1/ALL key: Press this key to set 1-track repeat or All-track repeat (all tracks on disc or all tracks in program).
MULTI key: For Multi-Repeat which repeats up to two blocks, press this key to set their start and end points.This key can specify two-blocks, block A and block B.
START key: Press this key to start the Multi-Repeat between two sets of start and end points specified with the MULTI key.

INDEX (←, →) Keys
For Index Search which allows to start CD play from one of the index Nos. recorded on the disc, press these keys to specify the desired index No. When one of these keys is pressed for the first time, index No. 01 is displayed. Every further press of one of these keys changes the index Nos.
← key: Press to return to the previous index No. (until index No. 01).
→ key: Press to advance to the next index No. (until index No. 99).

Search (◄◄, ►►) Keys
Press these keys in the Play or Pause mode to move the play position by fast forward or fast reverse operation.
◄◄ key: Press and hold to fast reverse the play position (until the beginning of track No. 1).
►► key: Press and hold to fast reverse the play position.
* These keys are not valid in the Stop mode.
* In the Compu Edit operation, these keys are used to vary the tape recording time setting in 1-minute steps.

(11)
TIMER Switch
Set this switch when an audio timer is used for timer CD play.
PLAY: For CD play from track No. 1.
RANDOM: For Random Play.
* Be sure to set the TIMER switch to OFF unless when the timer play is required.

Remote Controller: RS-1110

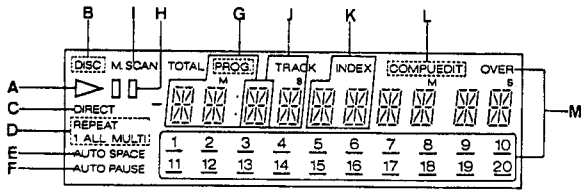


(12)
Infrared Transmitter
When any of the control keys on the remote controller is pressed, the infrared ray according to each key is transmitted from here.

(13)
DISPLAY - ON/OFF Key
Press this key to switch the front panel display ON and OFF The advantage of switching the display OFF is the elimination of electrical influence from the FL display tubes.
* This key is not provided on the main unit front panel.

Other keys on the remote controller have the same functions as the front panel keys with the same names

Display details



A. Play (▷) Indicator
Lights during CD play.

B. DISC Indicator
Lights while a disc is present on the disc tray. Blinks for about 4 seconds when the power is switched ON or when the disc tray is closed.

C. DIRECT Indicator
Lights when the Direct track selection mode is selected by the 10KEY MODE key.

D. REPEAT Indicators
Lights during Repeat play. In addition to the REPEAT indicator, the "1" indicator lights with 1-Track Repeat, "ALL" indicator lights with All-Track Repeat (or Program Repeat), and "MULTI" indicator lights with Multi-Repeat.

E. AUTO SPACE Indicator
Lights when the Auto Space feature is set.

F. AUTO PAUSE Indicator
Lights when the Auto Pause feature is set.

G. PROG. (Program) Indicator
Lights in the Program mode to display the program No.

H. Pause (▯▯) Indicator
Lights in the Pause mode.

I. M. SCAN Indicator
Lights during Music Scan.

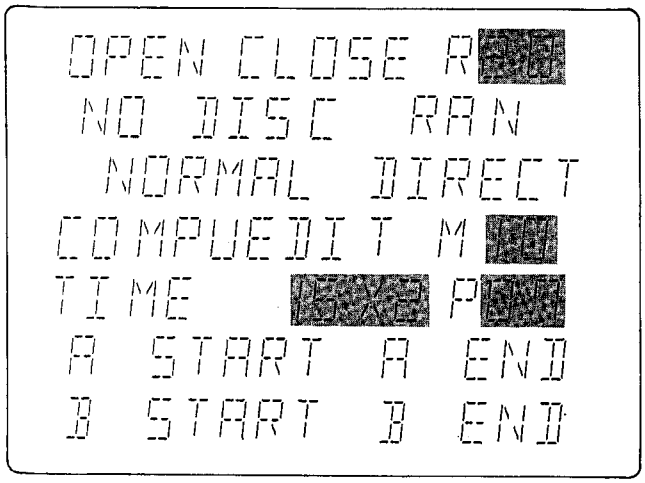
J. TRACK (track number) Indicator
Displays the track No. When the disc tray is closed by pressing the OPEN/CLOSE key, this indicator displays the total number of tracks in the disc for about 3 seconds.

K. INDEX No. Indicator
Displays the index No. during Index Search.
* Also, during Random Play, an indication as shown below appears to indicate the Random Play mode.

L. COMPUEDIT Indicator
Lights during Compu Edit operation.

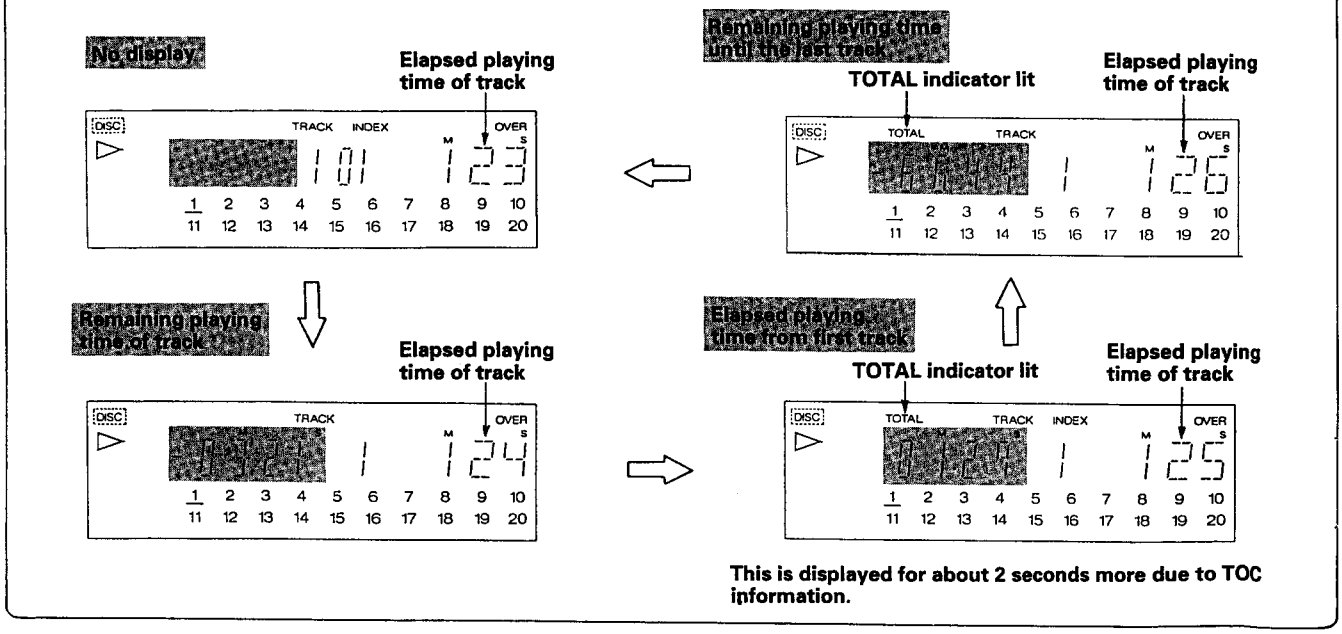
M. Music Calendar
Shows up to 20 tracks contained in the disc at a glance. The **"OVER"** indicator lights if the disc contains tracks over 20. Each track No. illumination is extinguished when the track has been played, so the whole of the Music Calendar goes out when the disc has been played. In the Program Play, Random Play or basic play operation, the selected track No. is illuminated. The "_" indicator below each track No. lights when the track is being played or when it is entered in the program.

When the keys are operated, the front panel display shows characters as shown below. The character display in the ▣ section varies depending on the contents of entry.



* When the DISPLAY - MODE key is pressed in the Stop mode, the **"TOTAL"** indicator lights and only the total playing time is displayed.
* The previous display resumes when the play is stopped.
* When the disc tray is closed by pressing the OPEN/CLOSE key, the total playing time is displayed for about 3 seconds.
* In case the disc contains over 20 tracks, the display of remaining playing time of track becomes "–M–S", and the Music Calendar is extinguished.

Playing time display The displayed contents vary every time the DISPLAY - MODE key is pressed.



This is displayed for about 2 seconds more due to TOC information.

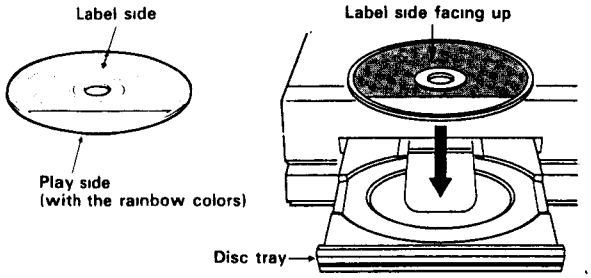
Tips on handling compact discs

Only those compact disc with the symbol shown on the left can be played with this unit. Any other type of disc cannot be played.

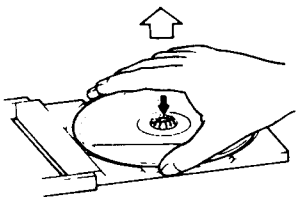
Handling precautions

Dirt, dust, scratches or warping affecting a compact disc can result in noise and malfunctioning.
Bear in mind the following points and make an effort to take care of your discs.

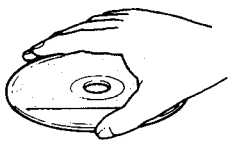
* Only one side of a compact disc can be played. When placing the disc on the disc tray, make absolutely sure that the label side is facing up.



* To remove a disc from the case, press the center of the case and, at the same time, take hold of both edges of the disc and lift free.



* When handling a disc, either hold both edges of the disc or hold the center hole and one of the edges. Take care not to touch the play surface.



* Wipe off any fingerprints and dust adhering to the play surface gently using as soft a cloth as possible. Always wipe from the inner circumference outwards toward the outer circumference.

* Under no circumstances should thinner, benzene, record cleaning fluids or other chemicals be applied to the play surface. They will interact with the surface and make it impossible for disc to be played porperly.
* Do not use anti-static agents since these may damage the discs.
* Do not adhere paper or other materials to, or write characters on, the label surface. Take care not to scratch or mark the surface. The protective film covering the label surface is particularly thin, and the pits (signals engraved onto the disc) may be damaged if the film is written on with a ball-point pen or other such implement or if it is scratched or otherwise marked.
* Abnormal sounds may be heard from inside the unit if an eccentric disc is used. Such discs should not be used.

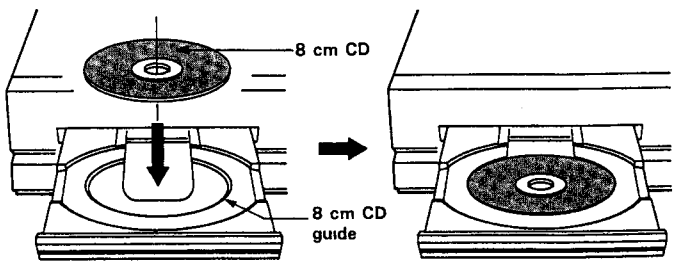
Storing discs

* Discs that have been played through should be replaced in their protective cases and stored.
* Do not store discs where they will be exposed to direct sunlight, near heating appliances or in locations with high temperature or high humidity levels.

Loading an 8 cm CD

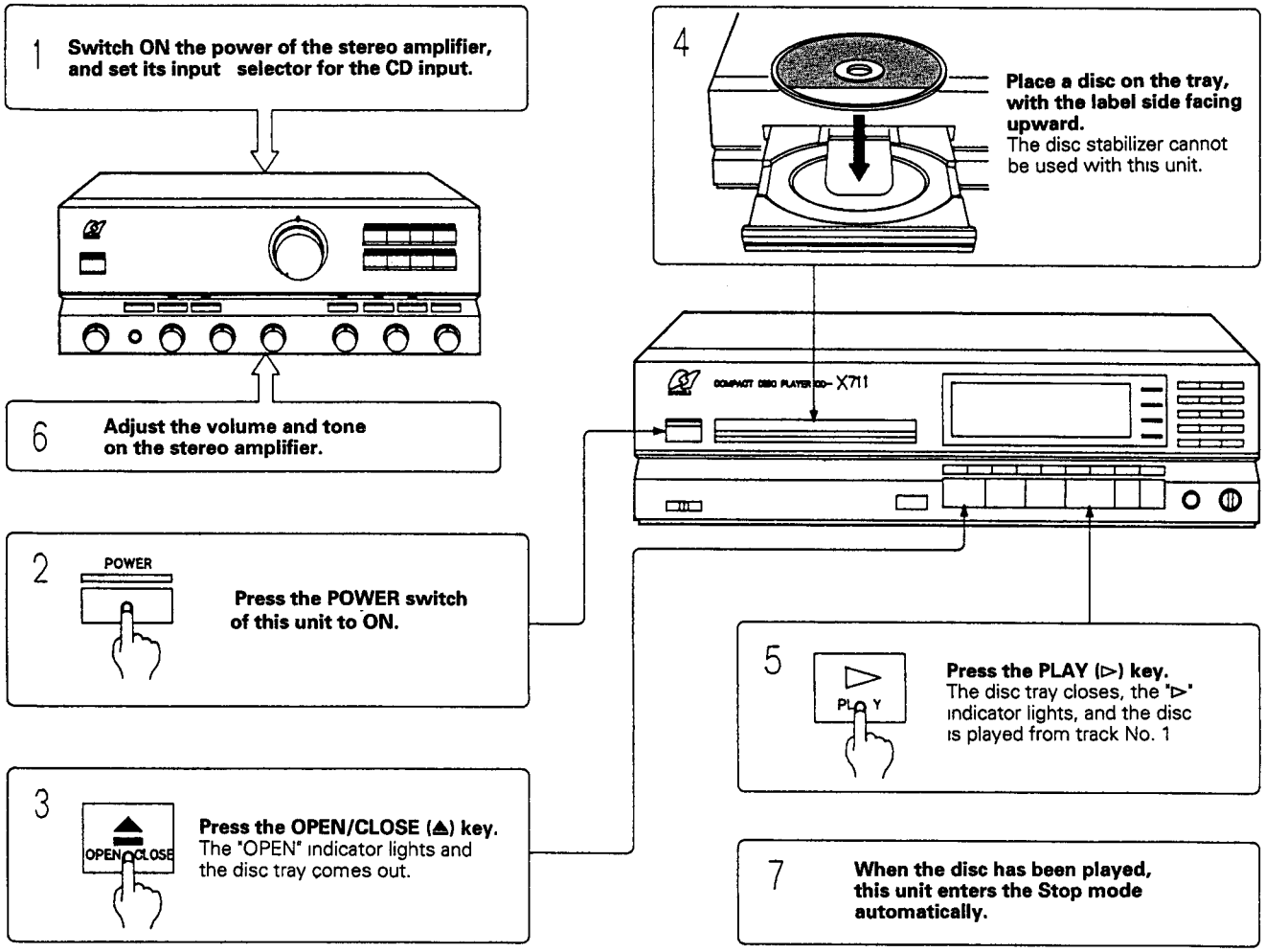
To play an 8 cm CD, hold the disc with the printed side up, and place it on the disc tray by aligning the center of the 8 cm CD guide. Ensure that the disc circumference fits the groove on the guide.

* Be sure to properly fit the disc on the disc tray with the 8 cm CD guide, and do not tilt or apply vibration or shock to the CD player; otherwise a malfunction may occur



Basic operations

To play a CD


1 Switch ON the power of the stereo amplifier, and set its input selector for the CD input.
4 Place a disc on the tray, with the label side facing upward. The disc stabilizer cannot be used with this unit.
6 Adjust the volume and tone on the stereo amplifier.
2 POWER Press the POWER switch of this unit to ON.
5 PLAY Press the PLAY (▷) key. The disc tray closes, the "▷" indicator lights, and the disc is played from track No. 1
3 OPEN/CLOSE Press the OPEN/CLOSE (⏏) key. The "OPEN" indicator lights and the disc tray comes out.
7 When the disc has been played, this unit enters the Stop mode automatically.

The **"OPEN"** indicator lights when the disc tray is opened by the OPEN/CLOSE key, and the **"CLOSE"** indicator lights when the tray is closed by it.

The **"NO DISC"** indicator lights on the display while no disc is present on the disc tray.

Notes:

* If the CD play does not start after the PLAY (▷) key is pressed, check the following. In the following cases, the DISC indicator does not light even if a disc is present on the disc tray.

1) Check if the disc is placed upside down.
2) Check if the disc is dirty or scratched.
   If the TOC information recorded on the disc cannot be read out due to dirt or scratches, that disc cannot be played.
3) It is also possible that moisture is condensed on the lens of the pickup inside this unit. If this is suspected, take out the disc and leave the unit with power ON for about an hour.

* Commercially-available disc stabilizers cannot be used with this unit.

* Be sure to place one disc at a time on the tray. Placing two or more discs will cause malfunction.

Note on time display

If the played disc contains "–" indication between tracks, the playing time display becomes as follows.

Display of elapsed playing time of track

– – –"2M20S"→"2M21S"→"–0M03S"→"–0M02S"→"–0M01S"

1st track ⟵ **2nd track**

→"–0M00S"→"0M00S"→"0M01S"→"0M02S"→ – – – –

Display of remaining playing time of track

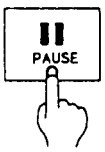
(The display is switched before reaching "0M00S".)

– – – "0M05S"→"0M04S"→"3M24S"→"3M23S"→"3M22S"

1st track ⟵ **2nd track**

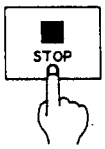
Basic operations

To pause play temporarily:
Press the PAUSE (II) key.
The "II" indicator lights and the CD play pauses at the current play position.



To resume the play, press the PAUSE (II) key again or press the PLAY (▷) key.

To stop play:
Press the STOP (■) key.
This unit enters the Play mode, with its pickup returned to the start position.



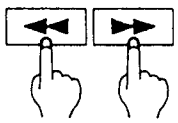
To stop play and take out the disc:
Press the OPEN/CLOSE (⏏) key.
The disc tray opens and comes out.

While the disc tray is open;
when the PAUSE (II) key is pressed,
the disc tray closes and the unit enters the Pause mode at the beginning of track No. 1. (The "II" indicator is lit.)

when the OPEN/CLOSE (⏏) key is pressed,
the disc tray closes and the unit enters the Stop mode at the start position. The display shows the total number of tracks and total playing time of the disc for about 3 seconds.

To fast forward or fast reverse the play position:
When one of the Search (◀◀, ▶▶) keys is held depressed in the Play or Pause mode, the play position can be forwarded or reversed at high speed.

Press the ▶▶ key for fast forward.
Press the ◀◀ key for fast reverse.



When one of the Search (◀◀, ▶▶) keys is pressed in the Play mode, the play sound is heard at a small level; listen to this and release the key at the desired position.In the Pause mode, no sound is produced while the key is depressed; refer to the time display and release the key at the desired time count.

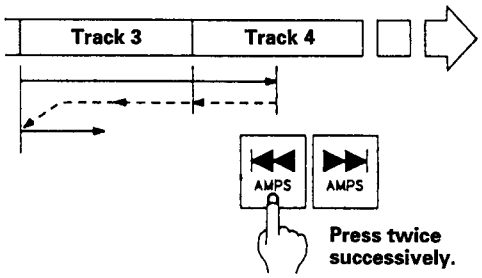
* When the ▶▶ key is held depressed over the end of disc, the unit enters the Stop mode at the beginning of track No. 1. If the All-Track Repeat has been activated, the play re-starts from track No. 1
* When the ◀◀ key is held depressed, the fast reverse continues until the beginning of track No. 1.

Note:
* Fast forward or fast reverse cannot be initiated in the Stop mode.

To search the beginning of desired track (AMPS)

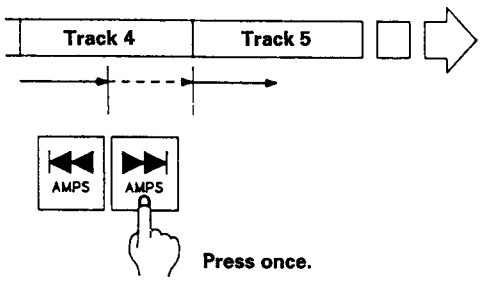
(AMPS : Automatic Music Program Search)
When one of the AMPS (⏮, ⏭) key is pressed, the play position can be returned to the beginning of the track being played or skipped to the beginning of the desired track.
Press the ⏮ key to search the beginning of previous track which is located before the current play position.
Every time the key is pressed, the beginning of the previous track is searched. If the key is pressed in the middle of a track, its beginning can be searched.

Example: To play track No. 3 while track No. 4 is being played ...



Press the ⏭ key search the beginning of next track.
Every time the key is pressed, the beginning of the next track can be searched.

Example: To play track No. 5 while track No. 4 is being played ...



Notes:
* Holding the AMPS (⏮, ⏭) key depressed searches tracks in succession.
* When one of the AMPS keys is pressed in the Pause mode, the unit enters the Pause mode at the beginning of hte searched track.
* When the ⏭ key is held depressed until the last track in the disc, the search is released. However, if it is during All-Track Repeat, the search continues to track No. 1 and after.
* When the ⏮ key is held depressed, the search continues until the beginning of track No. 1.
* **If the AMPS key is pressed during Random Play ....**

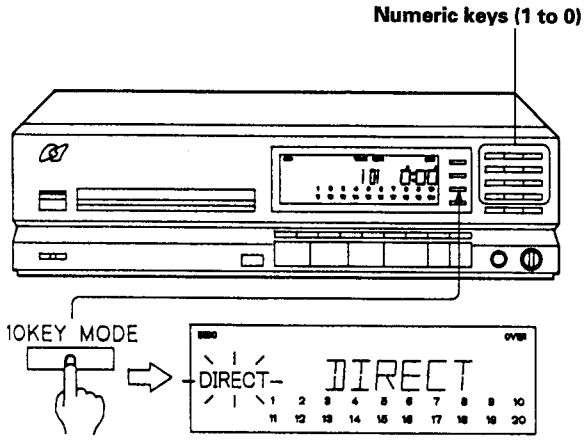
⏮ key: When the key is pressed once, the beginning of the track being played is searched. The track cannot be changed even if the key is pressed several times.
⏭ key: Every time the key is pressed, the next track is searched in a random order.

Value-added operations (To start play from desired track)

To start play from desired track (1)

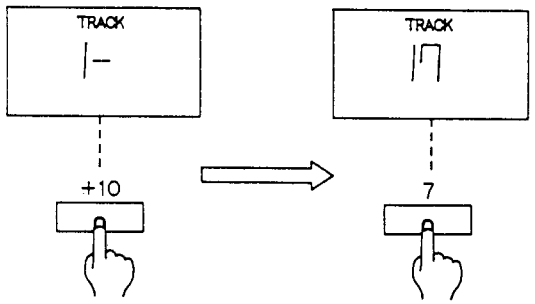
Direct track selection mode

1. **Press the 10KEY MODE key once.**
   Characters "DIRECT" are displayed on the center of the display for 4 seconds, and the "DIRECT" indicator lights on the left of the display.



2. **Enter the desired track No. by pressing the numeric (1 to 0, +10) keys.**
   The play starts from that track until the last track in the disc.
   To play track No. 10, press the "10" key.To start play from track No. 11 or more, first press the +10 key then, within 4 seconds, press the key for the digit of 1.

Example: To start play from track No. 17



3. **When the 10KEY MODE key is pressed again, characters "NORMAL" is displayed for 4 seconds and the Direct track selection mode is canceled.**

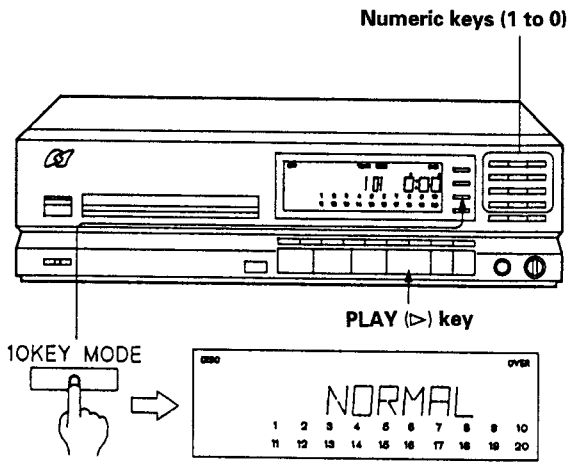
Notes:
In the Direct track selection mode,

* Program Play is not possible.
* Pressing the MUSIC SCAN key cancels the Direct mode.
* If a track which does not exist in the disc is selected in the Stop mode, track No. 1 will be played.If a track which does not exist in the disc is selected during play, the track being played will be played from the beginning.
* When the Auto Pause feature has been set (AUTO PAUSE indicator is lit), the unit automatically enters the Pause mode after Direct track selection. To start playback, press the PLAY (▷) or PAUSE (❚❚) key.
* The Direct mode is also canceled by switching the power OFF then ON again.

To start play from desired track (2)

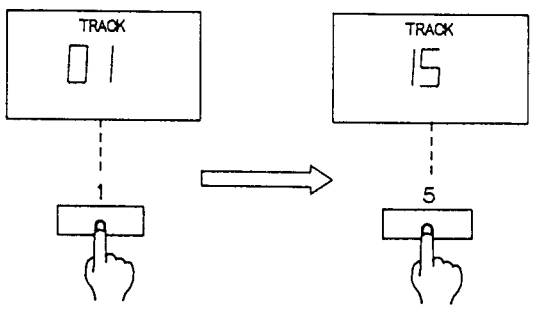
Normal track selection

1. **Press the 10KEY MODE key to set the Normal track selection mode.**
   Characters "NORMAL" are displayed on the center of the display for 4 seconds.



2. **Enter the desired track No. by pressing the numeric (1 to 0) keys.**
   To start play from track No. 10 or more, first press the numeric key for the digit of 10 then, within 4 seconds, press the numeric key for the digit of 1.

Example: To start play from track No. 15



3. **Press the PLAY (▷) key.**
   The play starts from the selected track until the last track in the disc.

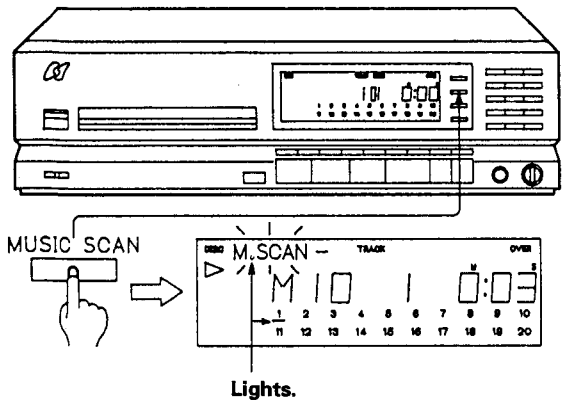
Notes:

* The unit is in the Normal track selection mode when the power is switched ON.
* Track No. 10 can also be selected by pressing the "10" key.
* The track No. can also be selected by pressing the AMPS (|◄◄, ►►|) keys.
* Even when the Normal track selection is initiated durng play, the play of the selected track will not start unless the PLAY (▷) key is pressed,
* When the numeric (1 to 0) keys are pressed, the figure is displayed on the "TRACK" No. display for only 4 seconds. The PLAY (▷) key-should be pressed in this period.
* If a track which does not exist in the disc is selected, track No. 1 will be played.

To find the desired track (Music Scan)

Music Scan plays only the beginnings of all tracks in the disc. This feature is especially useful when you want to find a the tune you like.

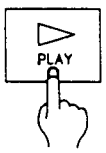
1. **Press the MUSIC SCAN key.**
   The MUSIC SCAN indicator lights, and the beginning of every track is played for 10 seconds in sequence. The indicator of the track No. lights while the track is played.The track No. illumination is extinguished when the corresponding track has been played.



Lights.

2. **To vary the playing time of Music Scan:**
   Press the numeric (1 to 0) keys together with the MUSIC SCAN key. The time for which the beginning of each track is played can be specified from 1 to 59 seconds.
3. **Press the PLAY (▷) key when the beginning of the desired track is played.**

The MUSIC SCAN indicator goes out and normal play starts.



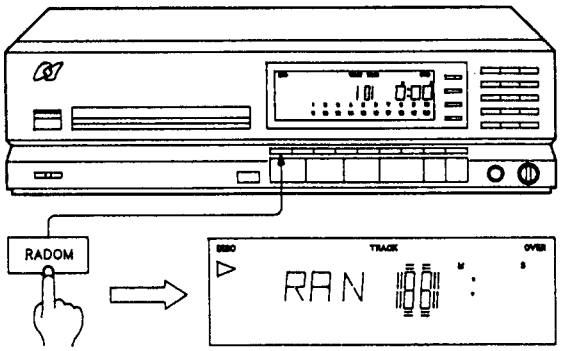
* Music Scan can also be initiated in the middle of normal play.
* If Program Play has been set, only the beginnings of the programmed tracks are played for the set period of time.
* If 60 seconds or more is specified, the time is set to 59 seconds.

Notes:

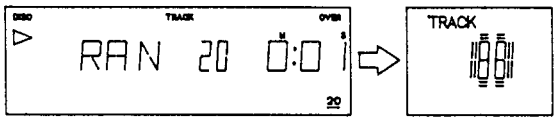
* When the SET key is pressed every time a desired track is played, those desired tracks are entered in the program.
* The playing time of Music Scan is 10 seconds when only the MUSIC SCAN key is pressed.
* The Music Scan can be canceled by pressing one of the Search (◀◀, ▶▶) keys.

To play tracks in a random order

1. **Press the RANDOM key.**
   All tracks in the CD are selected and played in a random order until all of them have been placed once. During track selection for Random Play, the TRACK No. display section of the display blinks as shown in the illustration.



There is no knowing which track will be played next.



* When the DISPLAY MODE key is pressed during Random Play, the number of remaining tracks to be played including the present track is displayed.

2. **When all tracks have been played in a random order, the unit enters the Stop mode at the beginning of track No. 1.**

To cancel Random Play in the middle:
Press the STOP (■) key. The unit enters the Stop mode at the beginning of track No. 1.Otherwise, press the PLAY (▷) key. The tracks after the track being played will be played in the original order in the disc until the last track.

Random Music Scan

1. **Press the RANDOM key.**
   The Random Play starts.
2. **Press the MUSIC SCAN key.**
   The beginnings of tracks selected in a random order will be played for 10 seconds each.
   * By pressing the numeric (1 to 0) keys together with the RANDOM key, the time for which the beginning of each track is played can be specified from 1 to 59 seconds.
3. **To cancel Random Music Scan, press the STOP (■) key.**
   The unit enters the Stop mode at the beginning of track No. 1.

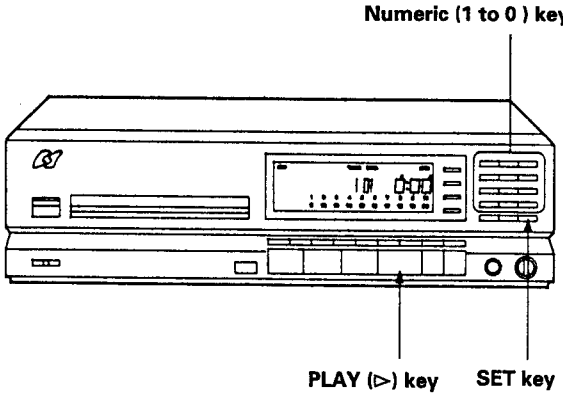
To repeat Random Music Scan for several times, press the REPEAT - ALL key after step 2 above so that "REPEAT ALL"lights.
The Random Music Scan will start and repeat.
To cancel, press the STOP (■) key. The unit enters the Stop mode at the beginning of track No. 1.

* When the SET key is pressed every time a desired track is played in Random Music Scan, those desired tracks are entered in the program.

Program Play

Playing tracks in the desired order

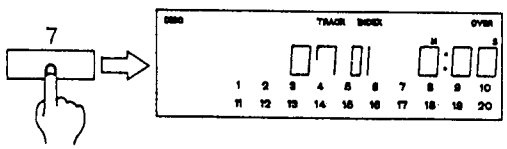
The Program Play allows to specify up to 20 tracks in a disc, arrange them in the desired order and play them.



To start Program Play

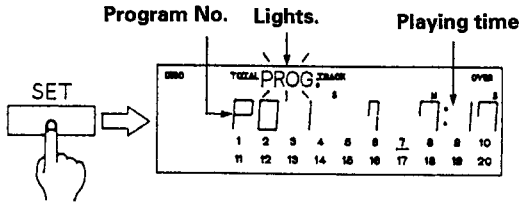
1. **Specify a track No. to be entered in the program by the numeric (1 to 0) keys.**
   The specified track No. is displayed.

For example, when "7" is pressed:



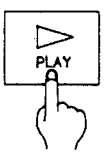
* The track No. can also be specified by pressing the AMPS (|◄◄, ►►|) keys.

2. **Press the SET keys.**
   The program No. is displayed, indicating that track No. is entered in the program.



3. **Repeat steps 1 and 2 for each of other tracks.**
   Enter the tracks in the order they are to be played.Up to 20 tracks (P20) can be entered in the program.

4. **Press the PLAY key (▷).**
   The tracks are played in the order of program.



5. **After all tracks have been played, the unit enters the Stop mode.**

Notes:

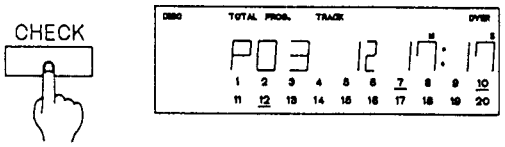
* If, without using the CHECK key, the track No. is specified and the SET key is pressed, the track is entered after the last program provided that the number of tracks in the program are less than 20.

* When the numeric (1 to 0) keys are pressed, the figure is displayed on the "TRACK" No. display for only 4 seconds. The previous display resumes in 4 seconds.

To check the program contents

1. **Press the STOP (■) key to enter the Stop mode.**
2. **Press the CHECK key.**
   Every time the CHECK key is pressed, the program No. and the track No. corresponding to that program No. are displayed in sequence.

Example: When track No. 12 is programmed in program No. 3



To change the program contents

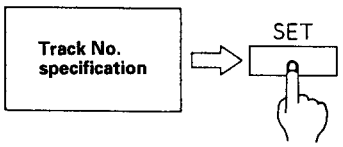
1. **Press the CHECK key for the required number of times to display the program No. to be changed.**
2. **Specify the new track No. to replace.**
   The display shows the new track No.
3. **Press the SET key.**
   The new track No. is entered in the program.
   If there are several program Nos. to be changed, repeat steps 1 to 3 for each of them.

To add program contents

Follow the steps below to add tracks to the program after having played it or when the unit is returned in the Stop mode.

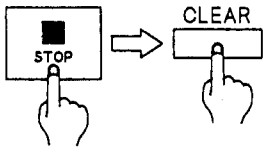
1. **Specify the track No. to be added to the program.**
2. **Press the SET key.**

If there are several tracks to be added, repeat steps 1 and 2 for each of them.



To clear program contents

1. **Press the STOP (■) key to enter the Stop mode.**
2. **Press the CLEAR key.**



* Every time the CLEAR key is pressed, the last track in the program is cleared.
* To clear a specific track, press the CHECK key for the required number of times to display that track No., then press the CLEAR key.
* Holding the CLEAR key depressed clears all tracks in sequence.

The whole of the program can also be cleared by pressing the OPEN/CLOSE (⏏) key.

Notes:

* Only Program Play is possible while the program containing tracks is present. When it is required to play all tracks, the program should be cleared by pressing the CLEAR key.
* When the ◄◄ key is held depressed during Program Play, fast reverse cannot go beyond the track being played.
* When the ►► key is held depressed during Program Play, only the track being played can be fast forwarded until its end.
* If a track which does not exist in the disc is specified, it is not entered in the program.

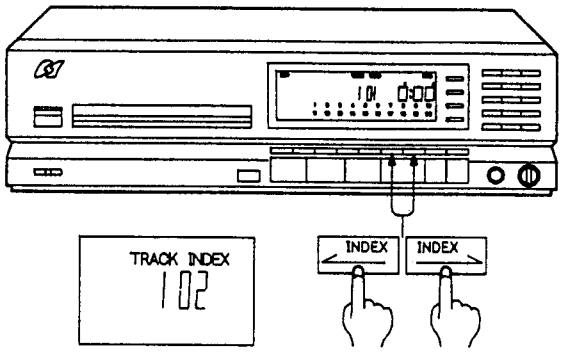
* The total playing time of the program is displayed in the Stop mode. However, the actual playing time may be longer than that due to the search time and space time (when ON).
* If the total playing time of the program is 100 minutes or more, the time display becomes "–M–S"
* If the disc contains 21 or more tracks and track No. 21 or more is entered in the program, the time display shows "–M–S", and only the elapsed time of each track will be displayed.

To start play from desired index

Index Search

When the disc contains the index information (indicating the separations of parts of music), the disc can be played from the desired index by specifying its index No.

1. **Specify the desired index No. by pressing the INDEX (⇀, ↽) keys.**



⇀ **INDEX key:** Press to advance to the next index No.
↽ **INDEX key:** Press to return to the previous index No.
* Holding the key depressed varies the index Nos. in sequence (within the range from 01 to 99).

2. **Press the PLAY (▷) key.**
   The play starts from the position of the specified index No.
* When one of the INDEX keys is pressed during play, Index Search starts automatically and the play resumes from the position of the specified index No.

Notes:

* If an index No. which does not exist is specified, index No. 1 is searched and played. The search may take a long time.
* There are some discs which does not contain any index No. Index Search is not possible with such discs. (Ordinary discs contain only index No. 1.)
* The index No. cannot be specified during Program Play.

Compu Edit

When the tape recording time (the time of side A, side B, or continuously for sides A and B) is set, the Compu Edit feature selects the tracks that can be recorded in that time period, edits and records them on the tape deck connected to this unit.

Caution:

The Compu Edit feature can select up to 20 tracks.

The PAUSE (II) key should be pressed to start playing tracks edited by the Compu Edit feature.

To record tracks edited with Compu Edit

1 In the Stop mode, press the COMPU EDIT key once. Characters "COMPU EDIT" are displayed on the center of the display, and the "COMPU EDIT" indicator lights on the top right of display.Next, characters "TIME 15 x 2" are displayed. Specify the recording time by pressing the ⏮ or ⏭ key to display one of 15 x 2, 23 x 2, 27 x 2, 30 x 2, 45 x 2, 30, 46, 54, 60 and 90. If other recording time is required, press the ◀◀ or ▶▶ key to vary the recording time minute by minute.

To record each side of tape separately
(Use this method with non-reverse decks.)

* The recording time for side A and side B must be the same. Press the ⏮ or ⏭ key to specify one of 15 x 2, 23 x 2, 27 x 2, 30 x 2 and 45 x 2. Press the ◀◀ or ▶▶ to vary the recording time minute by minute.

* When the two sides of tape are recorded separately, the recording time can be set within the range from 1 minute x 2 at minimum to 50 minutes x 2 at maximum. After specifying the recording time, press the COMPU EDIT key again.

2. The set recording time is displayed blinking for 2 seconds, the track Nos. which can be recorded are illuminated on the Music Calendar, and the unit enters the Pause mode.
3. Put the cassette deck in the Record mode.
4. At the same time as above, press the **PAUSE (II)** key of this unit to start the play.
5. When the tracks for tape side A have been played, the set recording time for side B is displayed blinking for 2 seconds, the track Nos. which can be recorded on side B are illuminated on the Music Calendar, and the unit enters the Pause mode.
6. Place the cassette tape in the deck by reversing sides A and B, and put the cassette deck in the Record mode.
7 At the same time as above, press the **PAUSE (II)** key of this unit to start the play.
8. When the tracks for side B have been played, the "COMPU EDIT" indicator goes out and the normal display resumes.

To record two sides of tape continuously
(Use this method with auto-reverse decks.)

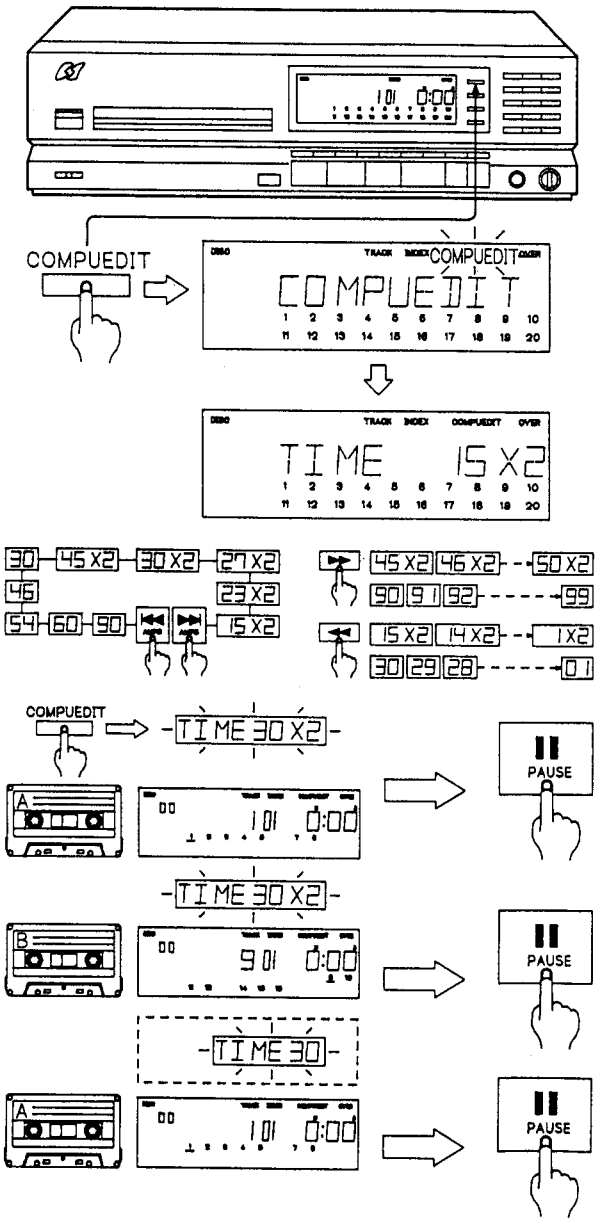
Press the ⏮ or ⏭ key to specify the recording time from one of 30, 46, 54, 60 and 90. Press the ◀◀ or ▶▶ to vary the recording time minute by minute.

* When the two sides of tape are recorded continuously, the recording time can be set within the range from 1 minute to 99 minutes.

2. The set recording time is displayed blinking for 2 seconds, the track Nos. which can be recorded are illuminated on the Music Calendar, and the unit enters the Pause mode.
3. Put the cassette deck in the Record mode.
4. At the same time as above, press the **PAUSE (II)** key of this unit to start the play.
5. When the tracks have been played, the "COMPU EDIT" indicator goes out and the normal display resumes.

To cancel Compu Edit:

Press the COMPU EDIT key again.



Notes:

* The Compu Edit feature can also be canceled by pressing the OPEN/CLOSE key.

* If the playing time of tracks is longer than the set recording time, the track with the shortest playing time in the disc is searched, and its track No. and playing time are displayed for 4 seconds.

* During Compu Edit, the display shows the playing time of each track played. When the DISPLAY MODE is pressed, the remaining playing time is also displayed.

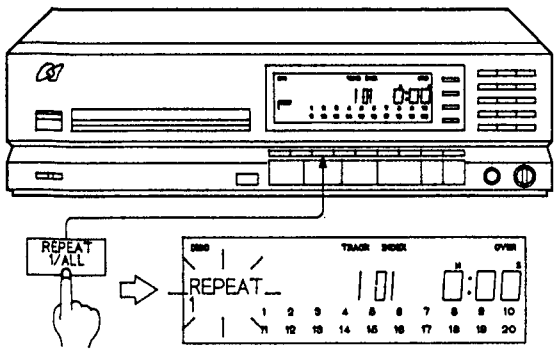
* During Compu Edit, the MUSIC SCAN key, 10KEY MODE key, AMPS keys, Search keys, INDEX keys and PLAY keys are defeated.

Repeat Play

This unit allows 1-Track Repeat, All-Track Repeat, Program Repeat and Multi-Repeat of two arbitrarily selected

To repeat the track being played (1-Track Repeat)

Press the REPEAT - 1/ALL key once during play.
The "REPEAT" and "1" indicators light on the display, and the track being played is played repeatedly.



Press once.

* In case another track is selected during 1-Track Repeat, the newly-selected track will be played repeatedly.
* When the 1/ALL key is pressed in the Stop mode then a track is selected, the selected track will be played repeatedly.

Note on REPEAT - 1/ALL key
The first press sets 1-Track Repeat, the second press sets All-Track Repeat, and the third press cancels both of them.

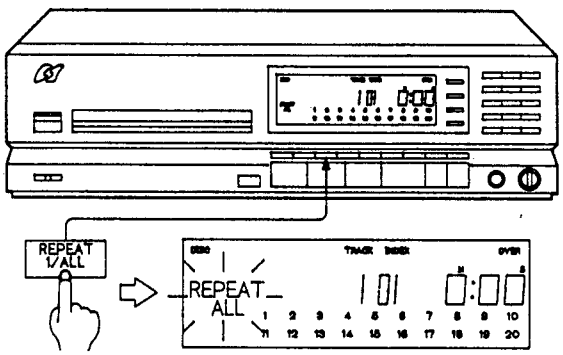
To cancel 1-Track Repeat:

Press the 1/ALL key twice.
The "REPEAT" and "1" indicators go out and normal play starts.

Note:
* When the 1/ALL key is pressed once during Program Play, the track being played will be played repeatedly.Pressing the 1/ALL key again initiates Program Repeat.

To repeat all tracks in disc (All-Track Repeat)

Press the REPEAT - 1/ALL key twice during play.
The "REPEAT" and "ALL" indicators light on the display. When the last track in the disc has been played, track No. 1 is played again, and all tracks in the disc will be played repeatedly.



Press twice successively.

To cancel All-Track Repeat:

Press the 1/ALL key once.
The "REPEAT" and "ALL" indicators go out and normal play starts.

To play one of the tracks in the program (Program 1-Track Repeat)

During Program Play, press the REPEAT - 1/ALL key once when the track to be repeated starts.
The "REPEAT" and "1" indicators light on the display, and the track being played by Program Play is played repeatedly.

To cancel Program 1-Track Repeat:

Press the 1/ALL key twice.
The "REPEAT" and "1" indicators go out and normal Program Play resumes.

To repeat all tracks in program (Program Repeat)

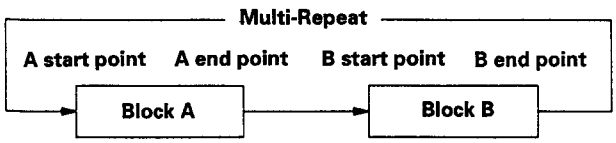
Press the REPEAT - 1/ALL key twice during Program Play.
The "REPEAT" and "ALL" indicators light on the display. When the last track in the program has been played, the first track in the program is played again, and all tracks in the program will be played repeatedly.

To cancel Program Repeat:

Press the 1/ALL key once.
The "REPEAT" and "ALL" indicators go out and normal Program Play resumes.
* When the numeric (1 to 0) keys and MUSIC SCAN key are pressed together during Program Repeat, the beginnings of all tracks in the program are played repeatedly, for the time period of 1 to 59 seconds specified by the numeric keys for each.

To repeat desired sections on the disc (Multi-Repeat)

The Multi Repeat feature allows to define two blocks, A and B, between two sets of arbitrarily selected points (start point, end point) and to play them repeatedly.



1 During play, press the MULTI key once at the start point of block A (the first block to be repeated).Characters "A START" are displayed for 1 second and the start point of block A is memorized. The "MULTI" indicator lights on the left of the display.
2. Continue the play or press the ▶▶I or▶▶ key to move forward. and press the MULTI key once at the end point of block A. Characters "A END" are displayed for 1 second and the end point of block A is memorized. Now block A is memorized.
3. Continue the play or press the ▶▶I or ▶▶ key to move forward. and press the MULTI key once at the start point of block B.Characters "B START" are displayed for 1 second and the start point of block B is memorized.
4. Continue the play or press the ▶▶I or ▶▶ key to move forward. and press the MULTI key once at the end point of block B. Characters "A END" are displayed for 1 second and the end point of block B is memorized. Now both blocks A and B are memorized.
5. Press the START key once. The "REPEAT" indicator lights on the left of the display, the start point of block A is searched, and blocks A and B will be played repeatedly.

To cancel Multi-Repeat:

Press the REPEAT - 1/ALL key twice.

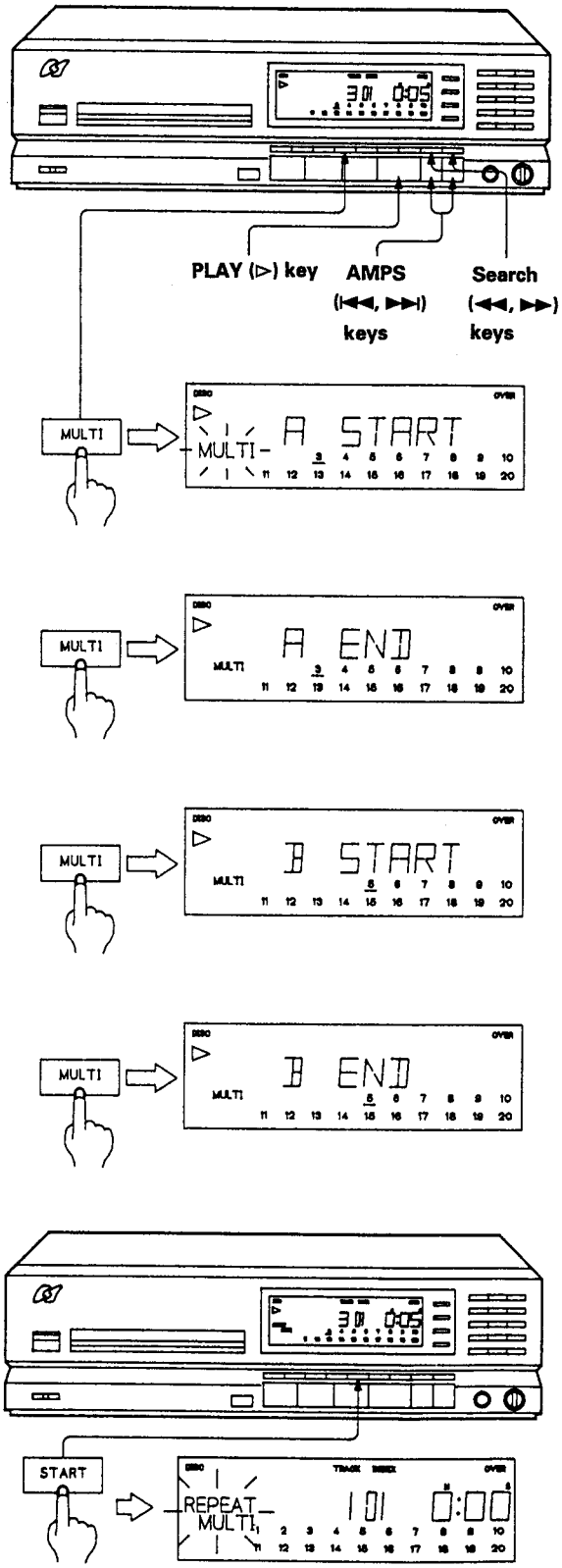
To repeat desired index sections repeatedly:

When the disc contains several index Nos., the desired sections between two sets of two index Nos. can be played repeated by using the Multi-Repeat feature.

Notes:

* The start point and end point must not be specified at the same time count.
* It is not possible to specify the end point at a previous position to the start point, or to specify block B at a previous position to block A.
* Repeat Play can also be caneled by pressing the OPEN/CLOSE key.
* Multi-Repeat is not possible during Program Play.
* Repeat Play is canceled when the PLAY (▷) key, STOP (■) key, AMPS (I◀◀, ▶▶I) keys, Search (◀◀, ▶▶) keys or INDEX key is pressed, or when Direct or Normal track selection is performed.
* The input points are held in memory while the "MULTI" indicator is lit on the left of the display.
* It is also possible to specify block A only and repeat that single block.

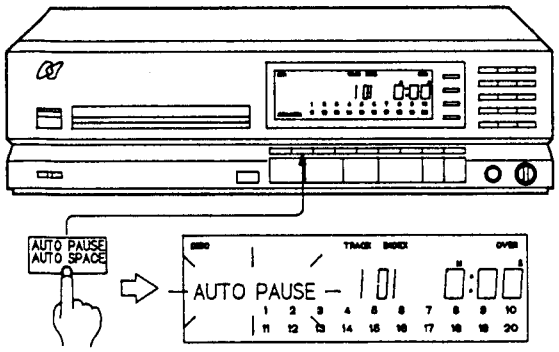
During 1-Track Repeat and Multi-Repeat, the total elapsed playing time and total remaining time are calculated and displayed with respect to the whole of the disc, and the information on that track or block is not displayed.



Auto Pause, Auto Space

To pause automatically at the beginning of desired track(Auto Pause)

Press the AUTO PAUSE/AUTO SPACE key once.



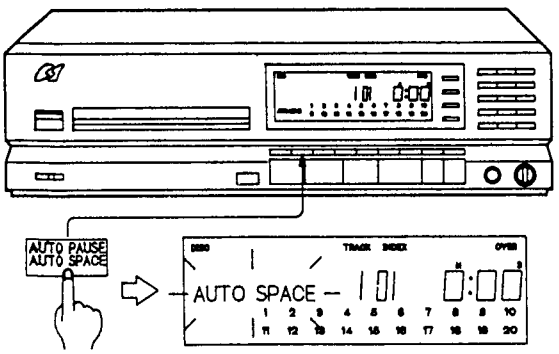
The "AUTO PAUSE" indicator lights on the display, and the unit hereafter enters the Pause mode every time a track is searched by track selection or Index Search.
To start play, press the PLAY (▷) key or PAUSE (II) key.

To cancel Auto Pause:

Press the AUTO PAUSE/AUTO SPACE key twice.The "AUTO PAUSE" indicator on the display goes out, indicating that the Auto Pause feature is canceled.

To play tracks by putting certain spaces between them (Auto Space)

Press the AUTO PAUSE/AUTO SPACE key twice.
The "AUTO SPACE" indicator lights on the display, and hereafter all tracks are played by putting spaces of 4 seconds automatically between them.



* The space of 4 seconds is also put at the beginning of the first track.

To cancel Auto Space:

Press the AUTO PAUSE/AUTO SPACE key once.
The "AUTO SPACE" indicator on the display goes out, indicating that the Auto Space feature is canceled.

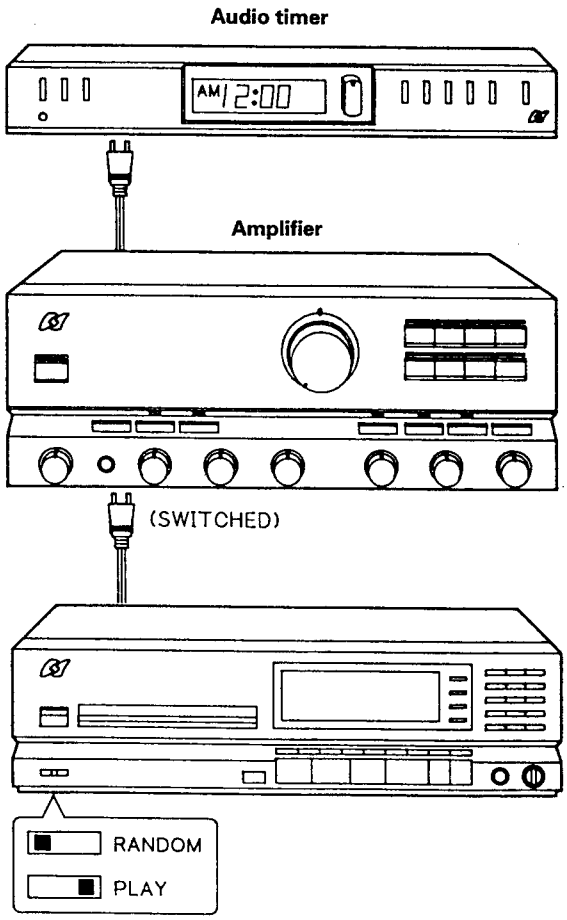
Note:

* If the disc is dirty or scratched, the search may take longer time so the space between tracks could become longer than 4 seconds.

Timer Play

By connecting an audio timer to this unit, the disc can be played at the desired time of the day.

1. Plug the power cord of this unit to a power outlet of the stereo amplifier, plug the power cord of the stereo amplifier to the audio timer, and set the POWER switches of both components to ON.
2. Place a disc on the disc tray and close the tray.
3. Set the TIMER switch of this unit as follows.
   RANDOM: To start Random Play by the timer.
   PLAY: To start with track No. 1 by the timer.
4. Set the amplifier's input selector to select the input jacks to which this unit is connected, and adjust the amplifier volume.
5. Set the audio timer for the time to start the play. This switches the powers of the amplifier and this unit.
6. When the time set by the audio timer comes, the Timer Play starts automatically.



Troubleshooting

What seem to be serious malfunctions are often due to simple operation mistake or due to other components. In case of difficulty, please check the following before calling for service.

SYMPTOM	POSSIBLE CAUSE	REMEDY
The disc tray does not come out when the OPEN/CLOSE (⏏) key is pressed.	The stopper is in the **LOCK** position.	Release the stopper by turning it to the **FREE** position.
	The power plug is disconnected.	Plug the power plug securely into the power outlet.
	Power is switched **OFF**	Press the POWER switch to **ON**.
Play does not start when the PLAY (▷) key is pressed.	The disc is placed upside down.	Place the disc with the label side facing upward.
	The disc is dirty.	Wipe dirt with a soft cloth.
	No disc is placed on the disc tray.	Place a disc with the label side facing up ward.
	Moisture is condensed on the pickup.	Leave the unit with power ON for about 1 hour, the re-try playing a disc.
Sound is not produced.	Cords are connected improperly.	Check connections and correct if re quired.
	The pin-plug cords are not connected secure ly.	Check the pin-plug cords and their connec tions.
	The amplifier is operated improperly.	Set the input selector and volume control again.
Noise is generated, or sound is skipped.	The disc is dirty.	Wipe dirt with a soft cloth.
	The disc is scratched or warped.	Use another disc.
The radio reception with the tuner is in terfered.	This unit is installed too close to the tuner.	Install the tuner and this unit more apart, or switch **OFF** the power of this unit.
Index Search does not function properly.	The disc being played does not contain index Nos.	Check by reading the instructions provided with the disc.
	An index No. which does not exist on the disc is specified.	
Remote control is not possible.	Remote control is not possible.	Replace batteries.
Malfunction occurs when the operation keys are pressed.	The remote controller is operated too apart from this unit or at an improper angle with re spect to it.	Operate the remote controller from less than about 6 meters from the unit, and at an angle within 30° to the left and right.
	The microcomputer is malfunctioning.	Switch the power **OFF**, then **ON** again.

Specifications

Format..... Compact disc, digital audio
Pickup.....3-Beam, semiconductor laser
Number of channels.....2 channels (stereo)
Decoding (D/A).....16-bit linear
Frequency response..... DC to 20 kHz, ±0.3 dB
Total harmonic distortion.....Less than 0.003% (1 kHz)
Signal-to-Noise ratio..... Better than 103 dB
Dynamic range..... Better than 98 dB
Wow & flutter..... Below measurable limit

Output voltages/load impedances
Normal output (OUTPUT-1)..... 2 V/ 5 kohms or more
Balanced output (OUTPUT-2)..... 2 V/ 600 ohms or more
Digital output (COAXIAL).....0.5 Vp-p ± 0.1V/ 75 ohms
Digital output (OPTICAL)..... 660 nm (emitted light wavelength)
Headphone output..... 45 mW (variable maximum)/with 32-ohm load

Power consumption.....AC 120,220~240 V , 50/60 Hz
For U.S.A & Canada.....AC 120 V , 60 Hz
Rated power consumption.....35 W
Dimensions..... 430 mm (16-15/16") W
127.5 mm (5-1/16") H
397.5 mm (15-11/16") D
Weight.....10.0 kg (22.0 lbs) net

Remote Controller: RS-1110

Control system..... Infra-red ray pulse system
Power requirements.....DC 3 V
Dimensions..... 64 mm (2-9/16") W
18 mm (3/4") H
176 mm (6-15/16") D
Weight.....140 g (0.3 lbs) including batteries

Accessories
Remote controller..... 1
Dry batteries (SUM-3)..... 2
RCA-type pin-plug cord..... 1

* **Design and specifications subject to changes without notice for improvements.**
* **Due to local laws and regulations, this unit sold in some areas are not equipped with variable voltage selectors.**